

## Wahi Pana o Hawai'i Nei Sacred sites in Hawai'i

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*Glidden's paper (this volume) describes six sites in the same general area in which Pu'uloa is located in Hawai'i Volcanoes National Park. Thus this appears to be an appropriate place to include a report of field work conducted in May 1995.*

*Pu'uloa is the largest single petroglyph site in Hawai'i: over 21,000 petroglyphs have been documented. An ancient trail runs through the site and petroglyphs also cluster along this feature. This paper describes the results of recent field work and compares Pu'uloa to other sites in Hawai'i, leading us to conclude that petroglyph designs relate to the function of the individual site. Please refer to map on page 40 for site locations.*

Pu'uloa, on the bleak and desolate windswept lower slopes of Kilauea Volcano in southeastern Hawai'i Island, is a well-known petroglyph site. Aside from some scattered small plants, a few *ohia* trees provide the only break in the seemingly endless sweep of lava; there is no nearby water source. A less inviting spot is difficult to imagine, and yet it has a hard grandeur. An enormous black lava mountain is on the north, the deep blue ocean is to the south. Steam and smoke from the lava flow are not only visible from the site but sulphur fumes permeate the winds that sweep across the side of the mountain. It is like the edge of a primeval world. Recent lava flows have covered over several other petroglyph sites a few miles to the east and there is fear that Pu'uloa--only two miles from the flow at this time--also will be lost if the trend continues.

The site is on an ancient inland trail that originally ran through this area from Lae'apuki to Keolakomo, crossing the northern part of the pressure dome (*pu'u*), and continuing across and through the site. Pu'uloa was not an occupation site but there are some temporary shelters nearby. The site is on the Kane Nui o Hamo lava flow, and its name, Pu'uloa, means "hill of long life". The "center" of the site is the *pu'u*, literally covered with petroglyphs--most of them cupules.<sup>1</sup> Vertical walls of deep cracks that run through the *pu'u* also contain cupules.

The trail system used by early Hawaiians served several functions. Some were destinations; others had ceremonial uses such as for the Makahiki festival<sup>2</sup>. Pu'uloa appears to be clearly linked to the trail which runs through it.

Early mention of the site comes from collections of notes

and photographs now in the Bishop Museum. One account, dated 1931, is by Rev. Albert Baker of Honolulu who wrote an account of the site in *The Hawaiian Annual* (1931:62-67), following a visit to Pu'uloa. He comments: "It is the most mixed up field I have seen, with a great variety of symbols." He noted: "... human figures, circles and concentric rings, dots, the usual phallic symbols, etc."<sup>3</sup>

Initial mapping of Pu'uloa in 1964 was by William Bonk of the University of Hawai'i at Hilo. This was a photo-mapping project for the Bishop Museum that produced a selection of ten maps<sup>4</sup> of the petroglyphs. According to Emory, Soehren and Ladd (1965:6-7), the recording was done "... by vertical photography ... Each photograph recorded the petroglyphs in an area covered by a five-foot square frame with a string grid marking off one-foot squares." The time and funds spent on this project far exceeded the original estimate and, although approximately 4,000 photographs were taken, the entire site was not photographed.<sup>5</sup>

In 1966, on-site sketch maps were made of selected segments of the central part of the site by J. Halley Cox. They were used as a check against the drawings made from Bonk's photographs [which had not been field checked]. Cox's drawings revealed considerable errors in the prior work which were attributed to difficulties in interpreting the photographic images (David Cox 1974:1). For example, photographs did not show

details of configuration, or width and size and natural features in the rock were sometimes drawn as parts of petroglyphs. We also noted discrepancies when we compared our scale drawings to those prepared by Bonk. Some motifs had been misplaced or, in putting the grids together, some



*View of the pu'u from the east. Petroglyphs, mostly in the form of cupules, run in a band, east-west. Few on the mound are on the north/south sides.*

were offset several meters from their actual location.

Ellis (1917:203), a visiting missionary, observed petroglyphs in 1824: the bulk of his comments are included in Glidden (this issue, page 39). He adds,

In some of the islands we have seen the outline of a fish portrayed in the same manner, to denote that one of that specie or size had been taken near the spot; some-times the dimensions of an exceedingly large fruit, etc., are marked in the same way.

One can only wonder what Ellis saw, or thought he saw. Depictions of fruit are, to our knowledge, unknown, and petroglyphs of fish are exceedingly rare (none are found at Pu'uloa). When we look carefully at his statement about the circumambulation, that a ring with dot signified a man and a number of rings indicated how many had walked around the island, and a semi-circle indicated

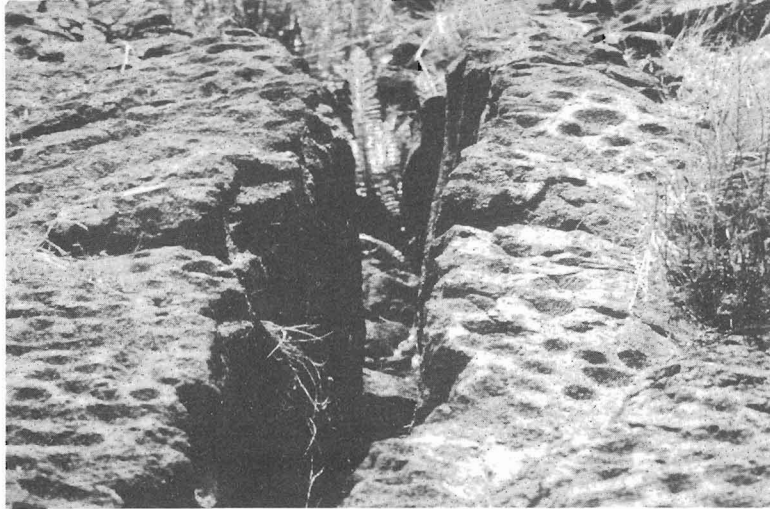
they had returned 'after reaching the place where it was made' defies analysis. However, because he made these notations at an early date, they are repeated over and over in the literature and may have been the impetus for calling the petroglyphs 'doodles' or idle markings: his "analysis" of their function suggests they are of little importance.

Based upon Ellis, Emory, Soehren and Ladd (1965:9-10) decided that petroglyphs "... served in the nature of signatures and the presence of names, some of them coupled with petroglyphs, after Hawaiians had learned writing further bears this out. Except for Ellis' information we would be quite at a loss to explain the circles and semi-circles. There is no reason to doubt the explanation given him that they were symbols which served to indicate a trip. . . ." And, "The appearance of the isolated form of the ancient Hawaiian sail presents a puzzle unless we regard it as a symbol denoting that the person who made it wished to indicate that he was a sailor or that he had come by sail on the way to reach this spot."<sup>6</sup> The conclusion reached by Emory, Soehren and Ladd (ibid.) is that very many of the petroglyphs at Pu'uloa were made after European discovery and when travel was made easier by the introduction of horses.

But we have another early account to suggest a function for these petroglyphs. Cox and Stasack (1970:56) state: "Puuloa is of particular significance because it is the only site for which a specific function has been recorded. Because it was still in use in the late 1800s, some of the older residents of Puna were able to relate some specific information about the meaning of the symbols found there."

In 1914, anthropologist Martha Beckwith (n.d.) recorded the following in her field notes:

Here [at Pu'uloa] is a large pahoe-hoe mound used as a depository for the umbilical cord at the birth of a child. A hole is made in the hard crust, the cord is put in and as stone is placed over it. In the morning the cord has disappeared; there is no trace of it. This insures long life for the child.



*Great cracks run through the pu'u and appear to be a focus for petroglyphs which cluster thickly along the edges. Cupules are also found inside the cracks on vertical surfaces.*

According to notes made by Beckwith, taken from a local guide, a dot was 'the hole for a child'; a dot in a circle, 'the hole for a first born'; and a dot within two circles, 'the first born of an alii'. A plain circle was a calabash; a zig-zag line was a 'mo'o' [lizard] and a circle with a long line was a 'puloulou' [tapu stick]; and so on. Beckwith went over these interpretations with another informant, a Mrs. Kama from Kamoamo, who suggested that her other informant would say anything for the sake of

pleasing (emphasis mine).

Another tale about Pu'uloa came from the son of Beckwith's informant, Sam Konanui:

Pu'uloa means a long life, and that is why they chose Pu'uloa to deposit the piko of their children. "You make a puka (hole) by pounding with a stone, then in the puka you put the piko, then shove a stone in the place where the piko is placed. The reason for putting in that stone is to save the piko from the rats . . ." Sam Konanui stated that pikos were apparently saved in a calabash, and then brought to Pu'uloa from all over the islands: "If they had ten children they would make ten pukas . . . They made the holes round in a ring so they would know they belonged to one family. (Cox and Stasack 1970:56).<sup>7</sup>

Relying upon early accounts, such as those by missionaries and other visitors to the islands is fraught with difficulties: Graves and Erkelens (1991:8-9) point out the problem of reliability when dealing with oral narratives or written sources. For one thing, errors may be made when the information was first recorded, and those collecting the information were undoubtedly culturally biased. That which may have been true for one of the islands of Hawai'i might not be true for all the islands. Accounts recorded in historic times may not have applied to the pre-historic period. Therefore early accounts that describe uses or interpretations of petroglyphs must be carefully and critically evaluated. In our opinion, the interpretation of the cupules as repositories or symbols for the placement of an infant's umbilical stump

is well within Polynesian tradition and has been recorded for Easter Island.<sup>8</sup> Calling the circles evidence for 'trips around the island', and so on, appears to be an unlikely construct.

Whether intentionally or not, the *piko* hole became a birth record. By no means were they the equivalent of a census, however. *Piko* also were placed in crevices or man-made holes where the family thought they would do the most good for the child and, probably, the child's family. This caused them to be placed in various special locations on each island. The navel, being the vital link with the mother, became the link to the *mana* of wherever it was placed. At Pu'uloa, the family sought long life; when Captain Cook appeared, there was a scramble to place *piko* in nooks and crannies of his ship so the child would receive the blessings of Lono, with whom Cook was identified (Beaglehole 1967:1225).

### The Pu'uloa project.

Documentation at Pu'uloa began in 1993 at the extreme eastern end of the petroglyph field (500 meters northeast of the *pu'u*) and proceeded westward. Because of high winds and magnetism, it was necessary to construct a reference line against which the growing grid could be related. The site was divided into 10 meter quads and for convenience, into ten loci. Our total of quadrants is 167; the area surveyed and recorded is 16,700 square meters. The petroglyphs follow the trail with the bulk of them being south of the trail. Locus 10 contains the actual *pu'u*. Within each ten meter square, panels of petroglyphs were gridded with twenty centimeter string grids and were drawn to scale on grid paper. The site was also photographed with 35 mm slide film.

The trail is the constant feature of this site. Foot traffic over the centuries has made a clear path through the petroglyphs, some of which have been erased; others are barely visible.

Natural formations in the lava often were utilized as part or setting for the designs. A particular favorite seems to be small natural dome-like blisters which have one or more cupules pecked into the top. We also found pecked lines of cupules along the spines or 'ropes' of lava.

The majority of the petroglyphs are cupules and circular geometric designs; the nearer to the *pu'u*, the higher the density. The site also has historic referents: not only block lettering and a sailing ship, but also some attempts to show cursive writing. The *pu'u* itself lacks variety; nearly every mark on it is a cupule.

At the end of the first field season our data base was just under 10,000 units. The universe of designs include the ubiquitous cupules (more than 70% of loci 1-9), circles, circles with variations, concentric circles and cup-and-ring combinations. Among the anthropomorphic figures, 3% are triangular figures and 'stick figures' are 0.6%.

The second field season, a three week period in April/May of 1995, completed the site's documentation by recording the petroglyphs on the *pu'u* itself. The *pu'u* lacks the clear-cut designs that we recorded along the trail, most of which are somewhat isolated from each other. In contrast, the *pu'u* is a concentrated mass of cupules, circular motifs and lines that

are often superimposed and extremely eroded. As the petroglyphs from our recent field trip have not yet been entered into the data base, we have an estimate only-- but one that indicates a minimum of 11,000. Thus the entire site contains more than 21,000 petroglyphs, making Pu'uloa the largest single site in Hawai'i.

A few unusual features were noted on the *pu'u*, in particular, the carving activity on edges of cracks. Great fissures run through the mound and seem to have been a focal point of activity. Cupules are worked into the vertical walls of some of the cracks, and cluster thickly along the crack edges. 'Edge notching', a feature not previously noted at Pu'uloa, was recorded..

Without doubt, Pu'uloa meant 'hill of long life' thus a visit to the site, and contact with it, apparently assured the faithful a long life. The placing of an umbilical stump was undoubtedly one of the reasons for the importance of the site, but not all of the depressions so served. According to Emory, Soehren and Ladd (1965:9):

It must be true that Hawaiians did visit Puuloa to place umbilical cords there . . . . Some of the dots, or cup-marks may have been made to receive them, but it was usual to put such cords into a natural deep crack or crevice. Most of the dots are far too small to hold an umbilical cord, and some of them are in rows of shallow cup-marks on the face of vertical fissures in the Puuloa Lava dome . . . . As we are now certain that most of the petroglyphs were executed singly and that the many hundreds of dots are actually tally marks indicating the visit of an individual or of the number of people in a visiting group, a count of those on the maps would be of value in estimating the minimum number of Hawaiians who had stopped in the area.

According to Cox and Stasack (1970:68-70), cupules were only used once. They suggest that:

The probable function of the *piko* tally marks at Puuloa and similar marks in other sites is fairly well established. Because of this and because of the great number of three particular kinds of these marks, a development from functionality to symbolism can be demonstrated. First, there is the simple *piko* hole, a circular depression in the pahoehoe lava which averages 2 inches in diameter and slightly less than 1 inch deep; second, the *piko* hole with a circle incised around it; finally, a great number of variations on the theme of a central dot with variously concentric circles, fragments of circular or U shapes, even such fragmented images as a series of dots which lie on the circumference of a circle, and bars or lines in series.

Kwiatkowski (1991:54) calls cupules 'tally marks' at Pu'uloa, suggesting that when dots are in a line, it indicates people marching in a single file; the numbers of dots describes the number of persons traveling together. He adds, however, that the ". . . majority of circles and semi-circles . . . were related to the *piko* ceremony" with the dot within the circle referring to a first born child (ibid:48). Cox (1971:171) suggests that the human figure is a form of self-portrait and



probably developed out of the dot-circle idea. Then, with increasing literacy, carvings became written names. Kwiatkowski is following the lead of Ellis; Cox's theory seems implausible for we find dot-circles at late sites, not early ones. On some islands, such as Lana'i and Kaho'olawe, we find none (Lee 1988; Stasack and Lee 1993).

The 'meaning' of the numerous circle motifs is obscure. However, for Hawaiians, "... the circle evokes a being enclosed in on itself because it is complete and self-sufficient. Accordingly, circular things and things capable of circular movement are often considered divine. ..." (Valeri 1985:89).

One of more interesting features at Pu'uloa is the variety of carving; some are deeply and carefully carved, obviously by someone with skill. Others are crudely pecked, or half finished. This suggests that some were made by *kahuna* in the process of working magic and offering prayers. The less well-made examples may have been made by travelers along the trail, or those who came to place the *piko* of their child here. It takes little skill to peck a cupule.

For the petroglyphs to be seen by individuals passing along the trail apparently was not important, as some motifs are pecked on surfaces that tilt away from the trail and can be viewed only if one leaves the path.

The dates of the *pahoehoe* lava flows that comprise this part of the volcano have an approximate age of AD 1200-1450 (Holcomb 1987:269; Ladefoged, et al., 1987:4). If these dates are correct, Pu'uloa's petroglyphs cannot be older than that time. Cox and Stasack (1970:61) originally thought that Pu'uloa and Puako were the two oldest sites in the islands. However it now appears certain that the petroglyph site at Puako has far greater claim to antiquity. A later date for Pu'uloa would account for the majority of human figures as having triangular bodies. Excavations at Hilina Pali (Cleghorn 1980) provide strong evidence for this general date on Hawai'i island.<sup>9</sup>

An earthquake and tidal wave that struck the area in 1868 probably marked the end of the general use of Pu'uloa. Kalapana was abandoned and a number of other villages were obliterated. The few remaining families in the area may have still come here but due to the abandonment of the villages, travel along the trail must have decreased markedly.

#### 'Anaeho'omalū

To compare Pu'uloa with 'Anaeho'omalū in South Kohala on the Kona side of the Big Island, we see that both have a trail in association with petroglyphs plus other interesting correlaries. Both have a majority of cupules, circles, and similar motifs; both have relatively few anthropomorphic figures, and the bulk of those are the later form, triangle bodied anthropomorphs. Unfortunately, 'Anaeho'omalū has not had full documentation. The site has been heavily impacted by the construction of a golf course which isolated the center of the petroglyph site; the periphery was bulldozed for the links. Thus we do not know its original extent. What remains of the petroglyph field is dominated by cupules and circles that surround a large collapsed lava tube. Some anthropomorphic figures are scattered around the site along

with a sprinkling of other types, including some historic elements. The trail through 'Anaeho'omalū was the source of much traffic in the 18th and 19th century but an older footpath meanders across and is still clearly visible. In several places the path has obliterated the petroglyphs.

We had limited time for our recording effort at 'Anaeho'omalū: only a portion of the site was recorded.

According to Cox and Stasack (1970:85) 'Anaeho'omalū contains several thousand units. This is surely a low estimate considering that our brief and incomplete study managed to document 2127 petroglyphs.

Despite the spotty documentation, the motifs that were recorded have been placed in a data base. Most common elements are cupules, circles and variations of circular elements (81%); only 5.8% are human figures. The numbers of triangular bodied anthropomorphs and stick figures are roughly equal. The remainder are feet, lettering, fishhooks, and historic elements such as sailing ships, and a horse and rider.

Thus we see that sites with trails have a particular universe of design types. When we compare and contrast them with sites that do not have trail associations, we find a major difference in the petroglyph inventory. These differences provide clear evidence that the motifs of Hawai'i's sites are not random but have a definite relationship to site function.

#### Puako

The sites at Puako are divided into three major components: Kao 1, the Kao boundary sites and Paniau. There are enough differences between the design inventories of these sites to suggest that they might have been function-specific, probably dedicated to special purposes, and not related to trails. The total for the Puako sites is 3434 petroglyphs with Kao 1 being the most heavily carved of the three (2275 petroglyphs). The site has a preponderance of the so called "stick" figures; of the anthropomorphic total (1618), 1544 are stick figures, and only 36 (2%) have triangular bodies.

At Kao 1 there appears to be a strong thread of continuity, lineage, family identification, and succession, as human figures emerge from or branch off from a central image. The intensive superimpositioning of designs suggests that the place itself was more important than clarity of the motif. Numerous feet motifs, particularly those depicting baby feet, indicate family or clan concerns. Some images, such as owl and turtle, may be *'aumakua*.<sup>10</sup>

How can the particular features of the site be accounted for? Perhaps rituals commemorating or ceremonially initiating the transformation of a special individual to the status of family *'aumakua* were performed at Kao 1. Tiny footprints may be records of new additions to the *'ohana*. Judging from the number of adult size feet accompanied by smaller ones, it would seem to signify a family record.

Other images, showing runners and dancers, warriors and family groups were also records in addition to other postulated connotations. Might we suggest that this site functioned as an early bureau of records and vital statistics,

history and legends? Births and deaths are the most notable starts and finishes. Did additions to the family tree signify a rite of passage? Was a newly qualified young branch added to the *kumu*, the trunk, source, and lineage?

The sites that stretch northward from Kao 1 had another function and we might search for it by examining the idea of boundary in ancient Hawai'i. In the Hawaiian way of thinking, the word boundary, *palena*, has three levels of meaning in addition to a literal one. Breaking the word down, *pa* is defined as a fence or enclosure; *lena* means to stretch out, to sight or aim. *Lena* also means to bend, which is an interesting modification of its primary definition. A *palena* thus could be thought of as a stretched-out fence: an excellent definition of a boundary (Stasack and Lee, n.d.).

The concept of a boundary has immense symbolic and abstract potential plus severe practical and psychological connotations. It implies an end and a beginning, separation from something, limits and limiting factors, warnings, and more. In the visual realm it implies edges and contours. In an encounter with an edge, we can envision that which is to follow: edges are the most precarious parts of an encounter and create first (and lasting) impressions.

The boundaries at Puako separate Lalamilo from Waikoloa and were *kapu*. Travel across a boundary was forbidden except during the Makahiki (November through January). The boundary between these *ahupua'a* was not marked with fences or spikes and thus we cannot ascertain if the petroglyphs are to one side or the other. Either way, there can be no doubt that the residents of both areas knew well, for the penalty for violators was severe, often death.

At the Kao boundary sites, we have 890 petroglyphs that vary from 1 element to 144 at one site. Sixty percent are anthropomorphs and of that number, 21% are triangle bodied figures. But, for their universe of design types, they have more in common with Kao 1 than with the Paniau sites.

The Paniau sites (including the Malama trail site) have 269 units; 84% are anthropomorphic figures. It is fruitless to try and internally compute the ratio of Paniau's figures types because so many petroglyphs have disappeared over the years due to development in the area and bulldozer activity to make fire breaks. But, by including information from an earlier report by the Bishop Museum, it is clear that anthropomorphs

indeed are (and were) the dominate motif. Superimposition is rare. Long lines of figures were deemed important, suggesting some sort of organized activity. Huge figures in contrast to smaller ones may indicate chiefs vs commoners. A Lono image can be postulated. Triangle bodied anthropomorphs holding paddles aloft were notable. What might these indicate? Status? Ceremony? Warfare? Perhaps all three.

### Ka'upulehu

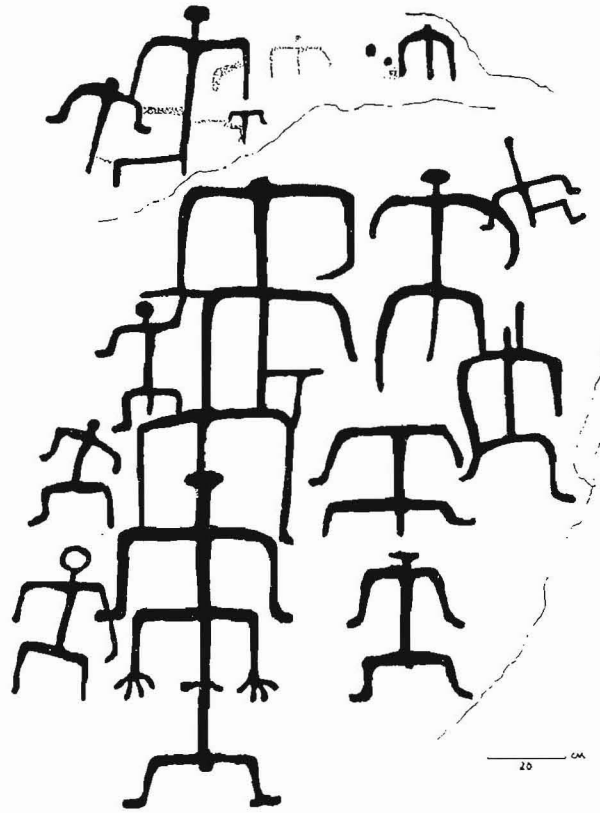
Ka'upulehu's petroglyphs represent some of the finest images in the Hawaiian islands. We were struck by the visual references to kingship, canoes, sailing, and fishing; this concentration may be indicative of sail technology or a sailing 'school.' Aside from sails, Ka'upulehu has more fish, fishhooks, and fish-trap motifs than any other single site in the island and some motifs, such as kites and a sacrifice scene are unique.

Of the 434 petroglyphs, most show considerable artistic and technical skill; nearly all were created with a fine sense of proportion and line. In most cases, the quality of the pecking is excellent. There appears to be an emphasis on chiefly concerns as is indicated by figures wearing headdresses. The images exhibit enough differences from other island locales to suggest that this site was dedicated to special purposes, most likely dealing with status concerns, myths, and rituals, sailing canoes or perhaps

a special 'school' of instruction in the arts of sailing and navigation. Canoes themselves were status markers, and belonged to chiefs.

### Kalaoa O'oma

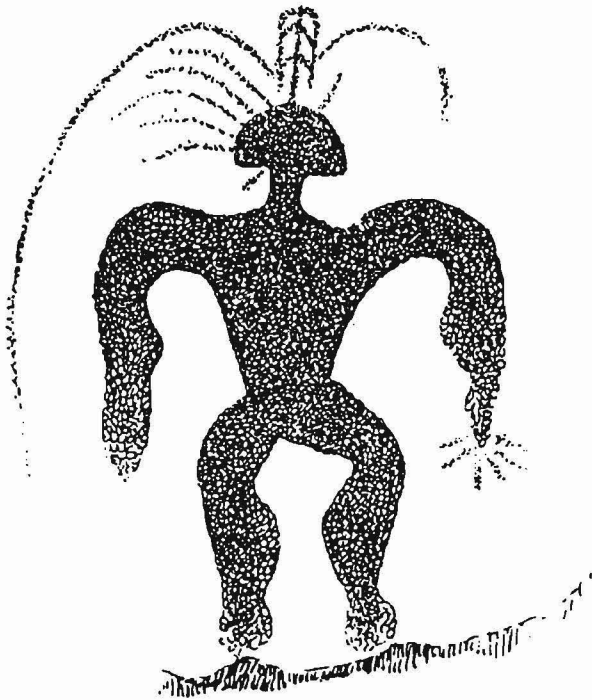
The cave at Kalaoa was used for a variety of purposes over time. It served as a burial cave, an occupation site, and a refuge. It appears from archaeological studies that the petroglyphs are associated with the earlier usage, probably the burial or occupation period. We noted 109 elements inside the cave and all those that are identifiable represent anthropomorphs. There are ten cupules (all on vertical surfaces); two of these are placed within the leg area of figures, one near the crotch. It is possible these refer to the genital *piko*, rather than sex markers.



*A grouping of stick figures from Puako suggests family connections or geneology. Many connect with each other and/or share limbs.*

## Conclusion

A comparison of three sites on the Kona coast (Puako, Kalaoa, Ka'upulehu) with two sites associated with trails ('Anaeho'omalu and Pu'uloa) reveals significant differences. Puako, Kalaoa and Ka'upulehu are within a few miles of



*One of the finely pecked anthropomorphs at Ka'upulehu; this stylistically advanced example has an elaborate feathered headdress.*

'Anaeho'omalu and each other, and yet their universe of design elements shows distinct variations.

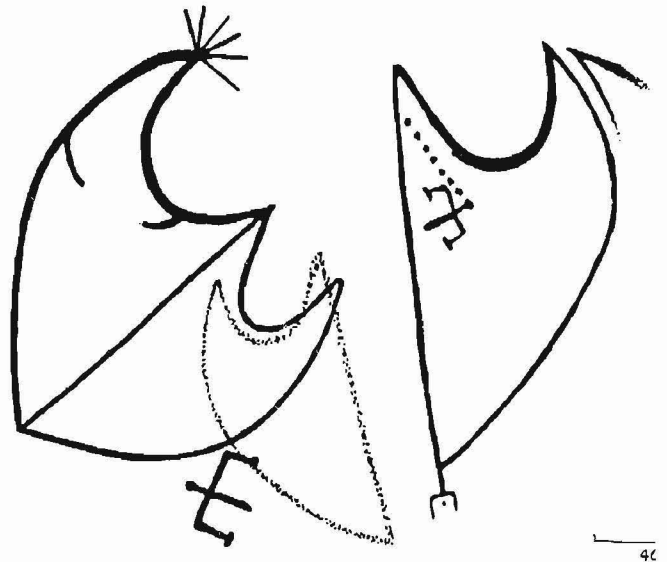
Ka'upulehu's extraordinary designs have a connection to royalty, status, and power. The anthropomorphs at the cave at Kalaoa seem to reflect ritual concerns, perhaps an association to burials within the cave. The Puako sites are complex and varied but the overall pattern is one of family connections. All are very different from 'Anaeho'omalu, which is associated with a trail.

However, when we compare 'Anaeho'omalu and Pu'uloa we see a comparative design inventory: these two stand apart. What they have in common is a trail. The petroglyphs at Pu'uloa and 'Anaeho'omalu had a functional value that related to the trail. The petroglyphs at the other sites reflect different matters, unrelated to trails.

One of the purposes of our documentation projects in Hawai'i was to better understand the petroglyphs in their context. When we began working at Pu'uloa, we realized that it was a large site but we did not fully comprehend its full extent nor did we expect to find such a difference in motif types. By computerizing the data, we found that a different universe of designs is associated with trails. Thus we can say that the type of motif bears a relationship to the function of the site, and that further studies of design type vs site type

may be the most fruitful in the future.

The importance and urgency of documenting the petroglyph sites in Hawai'i is clear; many sites are faced with destruction. The greatest impact is from volcanic activity. Sites in Hawai'i Volcanoes National Park continue to be threatened by lava flows and this trend is expected to continue. Active flows within the past two years have covered many petroglyphs, *heiau*, and village sites, and the lava shows no indication of halting. Pu'uloa may be the next victim of Pele's voracious appetite.



*Most of the crab-claw sails at Ka'upulehu are deeply carved; a few are pecked outlines, as if 'in process'. This type of sail was no longer used in Hawai'i after contact. One sail has what appears to be feather streamers.*

## Acknowledgements

The first field season at Pu'uloa was under the auspices of the University Research Expeditions Program, UC Berkeley; the final field season included volunteers Calvin Malone, Curtis Joe and Morgan McCarter who worked with us to finish the site.

The project was completed with the permission of Hawai'i Volcanoes National Park and we wish to express our thanks to Jan Keswick of the National Park; to Ed Stasack who has been my collaborator on numerous projects in Hawai'i and with whom I am working on a manuscript for a book concerning Hawaiian petroglyphs; to Frank Morin for his field and computer assistance; to the volunteers who labored in the hot sun on Pu'uloa's endless sea of lava; and to Gordon and Joann Morse of My Island Bed and Breakfast whose hospitality is unequaled. Mahalo.

## Footnotes

<sup>1</sup> The term 'cupule' is used to describe cup-shaped hollows worked into the rock. This term is widely used throughout the world and is a neutral one. In Hawai'i these worked pits often have been called 'piko' holes which indicates their use as a



*Kalaoa's freize-like panel contains figures with upraised paddles or staffs. However, these are in a static pose as opposed to those at other sites which appear to be in a fighting or dancing posture.*

repository for an umbilical stump. Undoubtedly, many of the cupules at Pu'uloa were for the *piko*. However, we recorded thousands that are 2, 3 and 4 cm in diameter and often extremely shallow. In addition, those on sloping or vertical surfaces could not have held anything. We have opted to use a term that is more generic.

<sup>2</sup> The Makahiki harvest festival was held in November-January of the year. This agricultural ritual was sponsored by the priests of the god Lono, who carried an image of the god around the islands in a tax collecting tour.

<sup>3</sup> It is not explained what Baker meant by "phallic symbols"; we located only one possible phallus at the site.

<sup>4</sup> Sixteen are listed but the other six apparently were not produced.

<sup>5</sup> The present whereabouts of the photographs are unknown.

<sup>6</sup> J. Halley Cox (1971:117) suggests that a representation of a crab-claw sail indicates pre-*haole* times for "... this type of sail disappeared almost simultaneously with the discovery of the islands in 1778".

<sup>7</sup> The *piko* has three aspects: the umbilical cord, the genitals, and the fontanel. The fontanel is the connection to the ancestors; the navel to the immediate previous generation (the mother); and the genital *piko* to future generations, thus creating a reasonable and logical system. The three *piko* locations, in the tradition of hidden meanings, have counterparts in consciousness. It is popularly held that each person has three levels of spiritual existence or consciousness: the self; the higher self; and the lower self. The self inhabits the body and is recognized as a particular individual; the higher self is that which is associated with the gods, the creator, and the source (*kumu*). Higher consciousness is not accessible without first passing through the lower self. Certain analogous relationships are suggested here: the self was embodied (given its existence) through the connection of the navel with the immediate ancestor, the mother. The connection to Papa, the earth mother, would be through the lower consciousness; to Wakea, the sky father,

through the higher consciousness.

<sup>8</sup> The *piko* concept has also been noted on Easter Island, which suggests considerable time frame for this practice, as wide dissemination indicates connections far back in Polynesia before the various groups split off from each other. On Easter, however, nothing has come down through the early ethnographies; the placing of an umbilical stump into a small natural bubble in the lava and covering with a stone was personally related by a traditional native family. It was said that the practice was more widespread in earlier times but disappeared once women began to have their babies in the hospital.

<sup>9</sup> Excavations at Hilina Pali uncovered petroglyphs below the carbon-dated fill level. These included a preponderance of stick figures; above the fill level, triangular bodied figures were in the majority. A triangle bodied figure on Kaho'olawe has an earlier date (Stasack, Dorn and Lee 1994).

<sup>10</sup> *Akua 'aumakua* were a class of deities related to kinship groups. Many were acquired individually but usually they were transmitted to descendants and associated with a group of kinsmen, 'personal gods', or ancestral deities of a family. Owl is one of the most important manifestations of 'aumakua (shark is another). Turtle is less clear but as a creature that intersects ocean and shore, it may be a metaphor between the living and the dead (Valeri 1985:23).

## References

- Baker, Albert S. 1931. Puna Petroglyphs *Thrum's Hawaiian Annual for 1931*, pp. 62-67.
- Barrera, W. 1971. Anaehoomalu: A Hawaiian Oasis. *Pacific Anthropological Records*, Vol.15. B.P. Bishop Museum, Honolulu.
- Beaglehole, J.C. 1966. *The Exploration of the Pacific*. Stanford University Press.
- Beckwith, Martha. [n.d.] Field Notes, Hawaiian Sources Collection, pp. 384-397. B.P. Bishop Museum Dept. of Anthropology, Honolulu.



- Bonk, W.J. 1965. Maps, Site HV-225. In: Emory, Soehren and Ladd. Prepared for the National Parks Service and Bishop Museum. Hawaii Volcanoes National Park.
- Cleghorn, Paul. 1980. The Hilina Pali petroglyph cave, Hawai'i Island. *B.P. Bishop Museum Report 80-1*.
- Cox, David W. (1974). Fieldwork Report on Mapping of Puuloa Petroglyph Field--Puna Site HA-HV-225. Unpublished Report, Hawaii Volcanoes National Park.
- Cox, J.H. (1966). Corrections and additions to Bonk. Ms., Bishop Museum.
- Cox, J.H. 1971. Appendix B: Results of a Preliminary Investigation of the Anaeoomalu Petroglyphs. Pp. 114-126. In: Anaeoomalu: A Hawaiian Oasis. *Pacific Anthropological Records*, 15. Department of Anthropology, Bishop Museum, Hawaii.
- Cox, J.H. and E. Stasack. 1970. *Hawaiian Petroglyphs*. Bishop Museum Special Publication 60. Honolulu.
- Ellis, William. 1917. *Narrative of a Tour through Hawaii*. [1823] Hawaiian Gazette, Honolulu.
- Emory, Kenneth P., Edmund J. Ladd, and Lloyd J. Soehren. 1965. Additional sites, test excavations and petroglyphs. The Archaeological Resources of Hawaii Volcanoes National Park, Part 3, Pp. 5-10. B.P. Bishop Museum, Honolulu. Typescript.
- Graves, M.W. and C. Erkelens. 1991. Who's in Control? Method and Theory in Hawaiian Archaeology. *Asian Perspectives* 30(1):1-17.
- Holcomb, R.T. 1987. Eruptive history and long-term behavior of Kilauea Volcano. In: *Volcanism in Hawaii*, Vol. 1. U.S. Geological Survey Professional Paper 1350.
- Kwaitkowski, P.F. 1991. *Na Ki'i Pohaku: A Hawaiian Petroglyph Primer*. Ku Pa'a, Honolulu.
- Ladefoged, Theng, Gary F. Somers, and M. M. Lane-Hamasaki. 1987. *A Settlement Pattern Analysis of a Portion of Hawaii Volcanoes National Park*. Western Archaeological and Conservation Center, Publications in Anthropology 44. US Dept. of Interior.
- Lee, Georgia. 1988. The petroglyphs of Lanai, Hawaii. Report, Castle and Cooke.
- Lee, Georgia. 1989. The petroglyphs of Puako, Hawaii. Report, Historic Sites Section, Department of Land and Natural Resources, State of Hawaii.
- Lee, Georgia. 1990. The Kao Trail petroglyphs, Puako Hawaii. Report, Historic Sites Section, Department of Land and Natural Resources, State of Hawaii.
- Lee, Georgia. 1993. The petroglyphs of Pu'uloa (HV-225) Hawai'i Volcanoes National Park. Report: National Parks Service, Hawaii Volcanoes National Park and Historic Sites Section, Department of Land and Natural Resources, State of Hawai'i.
- Stasack, Edward, Ronald Dorn and Georgia Lee. 1994. Dating Report on Accelerator Radiocarbon Ages on 13 Petroglyphs Sampled from Kaho 'olawe. Unpublished Report, collection of author.
- Stasack, Edward and Georgia Lee. 1992. The Ka'upulehu Petroglyph Site, Hawai'i. *Rapa Nui Journal* 6(4):82-87.
- \_\_\_\_\_. 1993. Petroglyphs of Kaho'olawe. Report: Kaho'olawe Conveyance Commission.
- \_\_\_\_\_. (n.d.) Petroglyphs of Hawai'i. Manuscript in process.
- Valeri, V. 1985. *Kingship and Sacrifice*. University of Chicago Press.

## NEWS AND NOTES

### What's New in Hangaroa.

A news item from Valparaiso reports that two cruising *norte Americanos* who arrived to Rapa Nui in a private yacht were rescued from the surf off Hangaroa by local fishermen. The visitors were rowing into the *caleta* in a small dingy when they were broadsided by a wave. Both men are in their 60s.

*El Mercurio*, 18 March 1995

In April 1994 an exhibit titled "A Tribute to Rapanui Women" was presented at the Centro Cultural Tongariki. This first tribute to island women was organized by Lili F. Teao Hereveri and other women from the island.

The exhibition consisted of 160 photographs concerning the history of Rapanui women. Approximately 500 visitors signed the guest book, and photographs, drawings and costumes, *lei* and crowns were borrowed from local residents.

Topics included: The first women (Vakai a Hiva, Ava Rei Pua); reproductions of female tattoo; Rapanui women in the first half of the 20th century; women in song and dance, and women in everyday life.

Two mothers of large families were honored: Sara Tuki (19 children) and Tomasa Araki (18), as well as eminent women (first teacher, mayor, etc.); and the oldest woman, Maria Carmela Tito Rangitopa (103 years of age with 12 children and 92 grandchildren). Along with the exhibit were several conferences, on various subjects, including Sexuality and Maternity; Rights and Duties of Women; Women's Tattoo; The Masculine and Feminine in Anthropology; Spirituality; and Preservation of the Rapanui Language. Plans for 1996 include an exhibit on the history of feminine costume on Rapa Nui.

*Marie Claude Poirier, Reunion Island.*

Three items recently appeared in *El Mercurio de Valparaiso*:

- The *carabineros* (police) of Rapa Nui have proposed four sites for consideration as a location for a new jail. One site is on the northeast side of Rano Kau, one at the northwest sector near the anthropological museum and two near Tahai.

The president of the Comisión Especial de Desarrollo, Claudio Rodriguez, stated that the existing prison on the island is inadequate: "... conditions of the prison are absolutely terrible and I would say not even at the level of the old dungeons."

- The mayor of Hangaroa, Petero Edmunds Paoa, blasted the intendente of the Fifth Region, Hardy Knittel, because the island ran out of flour and propane gas on 24th of May, and the last supply ship came in January. It is said another supply ship is starting to load now. Mayor Edmunds stated that a group of island store owners signed a contract to hire a ship to transport provisions to the island. He added that islanders cannot comprehend the ineptitude of Knittel and the Director of Transportation who they believe have made a contract that is prejudicial for the island. These complaints were rejected by Knittel.